

**R E M A R K S**

Reconsideration of this application is respectfully requested.

**RE: THE ALLOWABLE SUBJECT MATTER**

The Examiner's indication of the allowability of the subject matter of claims 12-14, 16, 20-22 and 24 is respectfully acknowledged. These claims, however, have not been rewritten in independent form at this time since, as set forth in detail hereinbelow, it is respectfully submitted that their respective parent claims also recite allowable subject matter.

**RE: THE PRIOR ART REJECTIONS**

Claims 9 and 17 were rejected under 35 USC 103 as being obvious in view of the combination of USP 6,809,764 ("Misawa et al") and USP 6,778,215 ("Nakashima et al"); claims 10 and 18 were rejected under 35 USC 103 as being obvious in view of the combination of Misawa et al, Nakashima et al and USP 6,700,609 ("Abe"); claims 11 and 19 were rejected under 35 USC 103 as being obvious in view of the combination of Misawa et al, Nakashima et al, Abe and USP 4,556,911 ("Imaide et al"); and claims 15 and 23 were rejected under 35 USC 103 as being obvious in view of the combination of Misawa et al, Nakashima et al and Imaide et al. These rejections, however, are respectfully traversed.

According to the present invention as recited in independent claims 9 and 17, an electronic camera is provided which includes an unnecessary electric charge flushing portion used to transfer unnecessary electric charges stored in the transfer path at a normal speed through the transfer path. This feature of the claimed present invention eliminates the problem in conventional electronic cameras whereby unnecessary charges remain when high speed flushing is carried out in an  $n : 1$  ( $n$  is a natural number not less than 3) interlace read type imaging element. In contrast to conventional electronic cameras, according to the present invention as recited in independent claims 9 and 17, by providing the unnecessary electric charge flushing portion to transfer unnecessary electric charges stored in the transfer path at a normal speed, unnecessary charges do not remain thereby avoiding any adversely effect on the imaging. See the disclosure in the specification at, for example, page 32, lines 17-21.

Significantly, it is respectfully pointed out that according to the present invention as recited in independent claims 9 and 17, the unnecessary electric charges are transferred "at a normal speed" through the transfer path. In this connection, it is noted that the specification discloses at page 37, lines 13-21 that "normal" speed means that electric charges are transferred at a speed of reading electric charges for displaying and the like, e.g., the transfer speed of signal charges which are stored

in an optical/electrical converter element of a CCD. In other words, both the speed at which the unnecessary electric charges are transferred from the transfer path by the unnecessary electric charge flushing portion and the speed at which the imaging element reads electric charges of the photodiodes are "normal" speeds.

Accordingly, it is respectfully submitted that the recitation of "normal" speed in independent claims 9 and 17 does have specific meaning, and it is also respectfully submitted that none of the cited prior art references disclose, teach or suggest an electronic camera including an unnecessary electric charge flushing portion used to transfer unnecessary electric charges stored in the transfer path at a normal speed through the transfer path, as according to the present invention as recited in independent claims 9 and 17.

As recognized by the Examiner on pages 3-4 of the Office Action, Misawa et al does not disclose an unnecessary electric charge flushing portion. For this reason, the Examiner has cited Nakashima et al to supply this missing teaching of Misawa et al.

It is respectfully pointed out, however, that Nakashima et al discloses that the speed at which the unnecessary electric charges are swept-out or transferred is carried out at a clock having a higher frequency than a frequency in normal transfer. In particular, at column 7, lines 22-32, Nakashima et al states

that the timing generating circuit 21 generates a clock having a frequency higher than a frequency in normal transfer in transferring the read out signals and further that "the sweep-out transfer is carried out in the CCD solid-state image pickup device 10 at a speed higher than the transfer speed in the normal transfer of transferring the read out signals charges before reading out the signal charges". Thus, Nakashima et al indisputably does not transfer unnecessary electric charges stored in the transfer path at a normal speed through the transfer path, i.e., the normal speed at which electric charges are read out for imaging purposes, but rather at a higher speed.

In addition, since Nakashima et al does not disclose an unnecessary electric charge flushing portion as according to the claimed invention, it is respectfully submitted that one of ordinary skill in the art would not have been motivated to combine the teachings of Nakashima et al and Misawa et al to achieve the structure of the present invention as recited in independent claims 9 and 17.

Accordingly, it is respectfully submitted that independent claims 9 and 17 patentably distinguishes over Nakashima et al and Misawa et al under 35 USC 103.

In addition, it is respectfully submitted that dependent claims 10, 11, 15, 18, 19 and 23 also patentably distinguish over the cited prior art references based on their dependence from

claims 9 and 17, as well as based on the further patentably distinguishing features recited therein. In particular, with respect to claims 10 and 18, it is noted that Abe does not disclose clamping a black level of the video signal during flushing the unnecessary electric charges. Instead, in Abe, a clamp is performed during the frame period.

In view of the foregoing, it is respectfully submitted that independent claims 9 and 17, and claims 10, 11, 15, 18, 29 and 23 respectively depending therefrom, all patentably distinguish over the cited prior art references, taken singly or in any combination, under 35 USC 103.

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If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned for prompt action.

Respectfully submitted,

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